INDEX TO VOLUME 24

Aceto-carmine (*See Carmine, aceto*)
Aceto-lacmoid, 96, 97
Aceto-orcein, 95, 96
Acid fuchsin (*See Fuchsin, acid*)
Acid green, 103, 106
Acid phosphatase, 254
  chemical and histochemical study of the technic for, 147
Acid thionin stain for Nissl bodies on frozen sections, 143
Acridine orange, 70, 71, 253
Acriflavin, 72
Alizarin red S, comparison with a recent German sample, 8
Alkaline phosphatase and glycogen, demonstrating the presence of in the same section, 215
American stains, comparison of with recent German products, 1
Amphibian yolk granules, differential staining of, 249
Angier, J. (*See Levaditi, J. C.*)
Aniline blue, W. S., 229, 230, 232
  comparison with a recent German sample, 4
Animal microtechnic (*Abs. section*), 68, 133, 196, 251
Animal tissue, embedding of, 87
  staining of, 73, 103, 127, 197, 198, 255
Anterior hypophysis, rat, an azocarmine stain for differential cell analysis of, 103
Arcadi, J. A. Hortega's silver carbonate method applied to gill parasites; with a note on the head organs, (abs.), 251
Argentaffin cells, a five-hour variant of Gomori's methenamine silver method for, 225
Arzac, J. P. and Flores, L. G. The histochemical demonstration of glycogen by silver complexes, 25
Auramine O, 70
  comparison with a recent German sample, 8
Azocarmine B, comparison with a recent German sample, 3, 5
Azocarmine G, 103–107
  comparison with a recent German sample, 3, 5
Azocarmine stain for differential cell analysis of the rat anterior hypophysis, 103
Azure A, 72, 207, 211, 213
Azure B, 208, 211, 213
Azure C, 207, 213

Bacteria, cytology of, 199
  staining of, 71, 165, 252
Bacterial cells, combination with certain fluorane derivative dyes at different hydrogen ion concentrations, 217
Baker, H. and Bloom, W. L. Further studies on the Gram stain, 198
Baker, R. F. (*See Hillier, J.; Pease, D. C.*)
Banny, Theresa M. and Clark, George. A simplified method for the double embedding of tissue, 223
Barnes, J. M. The staining of the duodenal mucosa of rats following the injection of solutions of tannic acid, (abs.), 196
Bartholomew, James W. (*See Evans, E. Edward*)
Basic fuchsin (*See Fuchsin, basic*)
Bayliss, M., Glick, D. and Siem, R. A. Demonstration of phosphatases and lipases in bacteria and true fungi by staining methods and the effect of penicillin on phosphatase activity, (abs.), 199
Biebrich scarlet, 191
Biological Stain Commission, membership list, 1949, 193
Bishop, Charles J. Pollen tube culture on a lactose medium, 9
Bismarck brown Y, 72, 85, 168, 231, 232, 233, 234, 235
Black, L. A. (*See Levine, B. S.*)
Block stain, Feulgen-picric-acid, additional data, 127
Blood, microtechnic of, 67, 69, 70, 133, 134, 251, 254
Blood pigments, red, selective demonstration of, 13
Bloom, W. L. (*See Baker, H.*)
Bowden, Wray M. Some modifications of Warmke's permanent section-smear method for plant chromosomes, 171
Boyd, George A. and Williams, Agnes I. Stripping film technics for histological autoradiographs, 254
Branch, G. E. K. and Tolbert, B. M. The spectra of some diaminotriphenylmethane dyes in concentrated sulfuric acid, (abs.), 196
Brecher, George. The structure of unstained reticulocytes, (abs.), 251
Brilliant cresyl blue, 39–45, 72, 251
  as a stain for plant chromosomes, 33
Brilliant green, 233
  comparison with German sample, 7
Briseno-Castrejon, Benjamin and Finerty, John C. An azocarmine stain for differential cell analysis of the rat anterior hypophysis, 103
Broadfoot, H. H. and Schwarz, E. R. An improved permanent mounting medium for textile fibers, (abs.), 252

Brode, W. R. (*See Morris, R. J.*)
Bruce-Mitford, Margaret (*See Jaques, Louis B.*)
Bucher, Gordon E. The anatomy of *Monodontomerus dentipes* Boh., an entomophagous chalcid, (abs.), 197
Bunting, Henry. The histochemical detection of iron in tissues, 109
Burtner, H. Jacquier and Lillie, R. D. A five-hour variant of Gomori's methenamine silver method for argentaffin cells, 225
Burton, C. J. Electron microscopy, (abs.), 195

Carbon fuchsin (*See Fuchsin, carbol*)
Carmalum, 202
Carmine, 69, 80, 198, 215, 216
  aceto, 11, 39, 40, 45, 47, 51, 52, 96, 177
  propiono, 47, 51, 52
Carrera, G. M. and Changus, G. W. Demonstration of acid phosphatase in *Endamoeba histolytica*, (abs.), 254
Carter, George H. (*See Laecom, Rodney C.*)
Castle, William B. (*See Daland, Geneva A.*)
Cell inclusions, hematoxylin-neutral-red as a stain for, 73
Celloidin-rosin-paraffin method, rapid, for embedding tissues, 87
Celloidin sections, thick, of nerve tissue, plastic embedding of, 137
Changus, G. W. (*See Carrera, G. M.*)
Chemical and histochemical study of the technic for acid phosphatase, 147
China blue, 80
Choline esterase activity, 255
Christensen, W. Blake. Observations on the staining of *Corynebacterium diphtheriae*, 165
Chromosomes, plant, brilliant cresyl blue as stain for, 39
Chromosomes, root tip, hydrochloric acid as a fixative for, 95
Chromosome smear preparations; Sudan black B, a new stain for, 177
Chromotrope 2R, 191
Clark, George (*See Banny, Theresa M.*)
Clayson, D. H. F. and Pirie, D. G. Observations on the proposed grading of ice cream by a methylene blue test, (abs.), 196
Clyman, Martin (*See Davidson, Harold B.*)
Cohen, Isadore. Sudan black B—A new stain for chromosome smear preparations, 177
Cole, V. W. Polarized light in photomicroscopy, (abs.), 67
Combination of certain fluorane derivative dyes with bacterial cells at different hydrogen ion concentrations, 217
Comer, J. J. and Hamm, F. A. Modified silica replica technique, (abs.), 195
Comparison of American stains with recent German products, 1
Concentrated formalin versus a 10% solution as a fixative preceding silver staining, 25
Congo red, 80, 232
  comparison with a recent German sample, 3, 6
Conn, H. J. (*See Darrow, Mary A.*)
Cook, A. H., Elvidge, J. A. and Heilbron, Sir Ian. Fertilization, including chemotactic phenomena in the Fucaceae, (abs.), 199
Corynebacterium diphtheriae, observations on the staining of, 165
Cotton blue, 71, 80, 199
Cottrell, Helen J. Tetrazolium salt as a seed germination indicator, (abs.), 198
Crabb, Edward D. A rapid rosin-celloidin-paraffin method for embedding tissues, 87
Crossmon, Germain C. The "dispersion staining" method for the selective coloration of tissue, 61
  The counting of red blood cells by darkfield illumination, (abs.), 67
  Mounting media for phase microscope specimens, 241
Cruickshank, J. C. A simple method for testing dye sensitivity of *Brucella* species, (abs.), 199
Crystal violet, 85, 86, 171, 172, 173, 175, 176, 233, 253
  comparison with a recent German sample, 5
Cytochemistry, 135, 136
Cytological staining, 39, 47, 68, 70, 95, 171, 177, 256

Dacanay, Joaquin G. A method for mass preparation of multiple histopathological slides, 99
Daland, Geneva A. and Castle, William B. A simple and rapid method for demonstrating sickling of the red blood cells: the use of reducing agents (abs.), 133
Darkfield microscopy, 67
Darrow, Mary A. Staining the tubercle organism in sputum smears, 93
Darrow, Mary A., Knapp, Frances, Stotz, Elmer and Conn, H. J. A comparison of American stains with recent German products, 1
Dass, C. M. S. Whole mounts of flat and round worms for morphological studies, 229
Davenport, H. A. (*See Heller, Richard E.; Lhotka, John F.; Porter, Robert W.*)

Davidson, Harold B., Clyman, Martin and Winston, Ruth L. A new fixative for vaginal smears, 145
Davies, Helen and Harman, Pinckney J. A suggestion for prevention of loose sections in the Bodian protargol method, 249
Davis, H. L. and Rynkiewicz, H. J. A fiber identification stain, (abs.), 68
Delafield's hematoxylin combined with safranin for anatomical preparations of plant parts, 191
DeLamater, Edward D. Basic fuchsin as a nuclear stain for fungi, (abs.), 134
Demonstrating the presence of alkaline phosphatase and glycogen in the same section, 215
Demonstration, histochemical, of glycogen by silver complexes, 25
Demonstration of a new nerve-cell organoid, 201
Deterioration of Schiff's reagent, 237
Dichromate-silver method, Golgi's, 117
Differential cell analysis of the rat anterior hypophysis, an azocarmine stain for, 103
Differential staining of amphibian yolk granules, 249
Differentiating yeast ascospores and vegetative cells, 85
"Dispersion staining" method for the selective coloration of tissue, 61
Double embedding of tissue, simplified method for, 223
Dowding, Eleanor Silver. The spores of *Histoplasma*, (abs.), 199
Doyle, William L. Effects of dehydrating agents on phosphatases in the lymphatic nodules of the rabbit appendix, (abs.), 254
Duffett, R. E. Hematoxylin-neutral red. A stain for cell inclusions and certain tissue elements, 73
Dyes and their biological uses (*Abs. section*), 133, 196, 251

Electron microscope, 67, 134, 195, 251
Elvidge, J. A. (*See Cook, A. H.*)
Embedding, 87, 117
  double, simplified method for, 223
  plastic, of thick celloidin sections of nerve tissue, 137
Engström, A. Quantitative cytochemical determination of nitrogen by X-ray absorption spectrography, (abs.), 134
  Quantitative micro- and histochemical elementary analysis by Roentgen absorption spectrography, (abs.), 135
  Ultramicroanalysis by X-ray absorption spectrography, (abs.), 135
Engström, A. and Jakus, M. A. Intracellular determination of protein by X-ray microspectrography, (abs.), 135
Engstrom A. and Lindström, B. Histochemical analysis by X-rays of long wavelengths, (abs.), 135
Eosin B, 218, 220, 221
Eosin Y, 69, 80, 136, 191, 197, 218, 220, 221, 250
  comparison with a recent German sample, 7
Erythrocruorin, selective demonstration of, 13
Erythrosin, 191, 197
  comparison with a recent German sample, 6
Erythrosin B, 218, 220, 221, 233
Evans, E. Edward, King, Carl W. and Bartholomew, James W. Differentiating yeast ascospores and vegetative cells, 85
Evans, Richard I. Delafield's hematoxylin combined with safranin for anatomical preparations of plant parts, 191

Fajer, A. (*See Rabinovitch, M.*)
Fast green FCF, 231, 232, 234, 235
Feulgen stain, 19, 237, 253
Feulgen-picric-acid block stain, additional data, 127
Fiber identification, 68, 134
Figge, Frank H. J., Weiland, G. S. and Manganiello, L. O. J. Cancer detection and therapy. Affinity of neoplastic, embryonic, and traumatized tissues for porphyrins and metalloporphyrins, (abs.), 251
Finerty, John C. (*See Briseno-Castrejon, Benjamin*)
Five-hour variant of Gomori's methenamine silver method for argentaffin cells, 225
Fixative for vaginal smears, 145
Fixing agents, 33, 95
Flat worms, whole mounts of for morphological studies, 229
Flint, Thomas J. and Matzke, Edwin B. Recent procedures for the study of three-dimensional shapes of resting cells, and a new method for the shape study of cells in division, (abs.), 70
Flores, L. G. (*See Arzac, J. P.*)
Fluorane derivative dyes, combination with bacterial cells at different hydrogen ion concentrations, 217
Fluorescein, 252
Fluorescence microscopy, 70, 71, 195, 197
Formalin, concentrated, versus a 10% solution as a fixative preceding silver staining, 25
Friend, James R., Jr. (*See Rosenberg, Lauren E.*)

Frozen sections, acid thionin stain for Nissl bodies on, 143
Fuchsin, acid, 13, 14, 16, 68, 71, 88, 191, 197, 230, 233
comparison with a recent German sample, 3, 6
Fuchsin, basic, 21, 22, 28, 70, 72, 85, 93, 134, 171, 172, 173, 199, 237, 253
Fuchsin, carbol, 85, 93, 94, 252, 254
Fuchsin, ponceau, as a routine counterstain, 191
Fungi, staining of, 71, 134, 199, 254
Furman, N. H. and Stone, K. G. A polarographic study of certain anthraquinones, (abs.), 133

Gentian violet, 85, 198
comparison with a recent German sample, 3, 5
German stains, recent, comparison of with American products, 1
Gerstel, D. U. Hydrochloric acid as a fixative for root tip chromosomes, 95
Getty, R. (*See Merrill, R. C.*)
Giemsa stain, 254
Glick, D. (*See Bayliss, M.*)
Glycogen, histochemical demonstration of by silver complexes, 25
staining of, 198
Glycogen and alkaline phosphatase, demonstrating the presence of in the same section, 215
Goldman, Morris. A single solution iron-hematoxylin stain for intestinal protozoa, 57
Golgi's dichromate-silver method. 1. Effects of embedding. 2. Experiments with modifications, 117
Gomori, G. Histochemical demonstration of sites of choline esterase activity, (abs.), 255
Histochemical demonstration of sites of phosphamidase activity, (abs.), 255
Histochemical specificity of phosphatases, (abs.), 256
Gomori's methenamine silver method for argentaffin cells, a five-hour variant of, 225
Gram stain, 198, 200, 253
Griggs, Frederick C. The chromosome smear technique: A critical review and improvement of method, (abs.), 68
Groat, Richard A. Initial and persisting staining power of solutions of iron-hematoxylin lake, 157

Hamm, F. A. (*See Comer, J. J.*)
Harman, Pinckney J. (*See Davies, Helen*)
Harris, J. O. Combination of certain fluorane derivative dyes with bacterial cells at different hydrogen ion concentrations, 217
Hayes, E. Russell. A rigorous redefinition of the plasmal reaction, 19
Heilbron, Sir Ian (*See Cook, A. H.*)
Heller, Richard E., Starr, Grier F. and Davenport, H. A. Thiazin dyes in supravital staining of nerve fibers, 207
Hematein, 158
Hematoxylin, 13, 57–60, 69, 73–77,100, 101, 103, 104, 105, 109, 110, 112, 113, 114, 136, 141, 157–163, 191, 192, 197, 232, 233, 235, 253
Hematoxylin, iron lake, initial and persisting staining power of, 157
Hematoxylin-neutral-red. A stain for cell inclusions and certain tissue elements, 73
Hemoglobin, selective demonstration of, 13

Heparin, metachromatic activity of, 72
Hillier, J. Some remarks on the image contrast in electron microscopy and the two-component objective, (abs.), 251
Hillier, J., Knaysi, G. and Baker, R. F. New preparation techniques for the electron microscopy of bacteria, (abs.), 195
Hirschler, Jan. The selective demonstration of red blood pigments (hemoglobin and erythrocrurorin) in microscopic balsam preparations, 13
Histochemical demonstration of glycogen by silver complexes, 25
Histochemical detection of iron in tissues, 109
Histochemistry, 147, 199, 215, 253
Histochemistry (*Abs. section*), 72, 134, 200, 254
Histopathological slides, multiple, a method for mass preparation of, 99
Hitier, H. and Quidet, P. Obtention de plantes polyploides par traitement a l'hexachlorocyclohexane et au sulfure de polychlorocyclane, (abs.), 70
Hock, C. W. (*See Kingsinger, W. G.*)
Hsu, J. H. An improved method for counting blood platelets, (abs.), 69
Hunter, Lillian M. A study of the mycelium and haustoria of the rusts of *Abies*, (abs.), 71
Hydrochloric acid as a fixative for root tip chromosomes, 95

Illumination for microscope, 195
Immersion oils, 196
Indicators, dyes as, 196, 198, 199, 253
Indigo carmine, comparison with a recent German sample, 3, 5
Indulin, 80

Initial and persisting staining power of solutions of iron-hematoxylin lake, 157
Insects, microtechnic for, 69, 197, 252
Intestinal protozoa, a single solution iron-hematoxylin stain for, 57
Invertebrate histology, 229
Iodine green, 233
Iron-hematoxylin lake, initial and persisting staining power of, 157
Iron-hematoxylin stain, single solution, for intestinal protozoa, 57
Iron in tissues, histochemical detection of, 109
Isenberg, H. D. Simplified method for staining spermatozoa, (abs.), 252

Jakus, M. A. (*See Engström, A.*)
Janus green, 76
Jaques, Louis B., Bruce-Mitford, Margaret and Ricker, Ann G. The metachromatic activity of heparin, (abs.), 72
Jelley, Edwin E. Light microscopy, (abs.), 195
Junqueria, L. C. (*See Rabinovitch, M.*)

King, Carl W. (*See Evans, E. Edward*)
Kinsinger, W. G. and Hock, C. W. Electron microscopical studies of natural cellulose fibers, (abs.), 134
Kitzmiller, J. B. The use of dioxane in insect microtechnieque, (abs.), 252
Knapp, Frances (*See Darrow, Mary A.*)
Knaysi, G. Preliminary observations on germination of the spores of *Bacillus mycoides* in a nitrogen-free medium and certain properties of the transparent cells, (abs.), 200
Knaysi, G. (*See Hillier, J.*)
Kramer, Sol. A staining procedure for the study of insect musculature, (abs.), 69
Kugler, J. H. Ponceau-fuchsin as a routine counterstain, 191

Laboratory hints from the literature, 67–72, 133–136, 195–200, 251–257
Lactose medium, pollen tube culture on, 9
Laecom, Rodney C. and Carter, George H. Erythrocytes in urinary sediment: identification and normal limits, with a note on the nature of granular casts, (abs.), 69
Laskey, Alice M. Acid thionin stain for Nissl bodies on frozen sections, 143
Lassek, A. M. and Powers, Margaret M. Concentrated formalin versus a 10% solution as a fixative preceding silver staining, 25
Laufer, Ira J. The differential staining of amphibian yolk granules, 249
Leucofuchsin, 130
Levaditi, J. C., Lepine, P. and Angier, J. Etude au moyen de la microscopie en fluorescence, des includions intrecellulaires acidophiles provoquées par les virus de la rage, de la vaccine, de la maladie de Borne, (abs.), 197
Levine, B. S. and Black, L. A. Newly proposed staining formulas for the direct microscopic examination of milk, (abs.), 71
Levine, P. (*See Levaditi, J. C.*)
Lhotka, John F. and Davenport, H. A. Deterioration of Schiff's reagent, 237
The Feulgen-picric-acid block stain. Additional data, 127
Light green SF yellowish, 71, 76, 233
comparison with a recent German sample, 7
Lillie, R. D. (*See Burtner, H. Jacquier*)
Lindström, B. (*See Engström, A.*)
Livingston, R. and Pariser, R. The chlorophyll-sensitized photo-oxidation of phenylhydrazine by methyl red. II. Reactivity of the several forms of methyl red, (abs.), 72
Lord, Thomas H. and Smull, Margaret M. An improved microscopic method of examining fatty foods, (abs.), 252

Malachite green, 85, 165–168, 196
comparison with a recent German sample, 7
Manganiello, L. O. J. (*See Figge, Frank H. J.*)
Markell, E. K. (*See Michael, Paul*)
Marshall, A. H. E. A method for the demonstration of reticulo-endothelial cells in paraffin sections, (abs.), 197
Martin, B. F. A method for demonstrating the presence of alkaline phosphatase and glycogen in the same section, 215
Mass preparation of multiple histopathological slides, a method for, 99
Mass production of permanent smear preparations, treatment of *Trillium erectum* prior to and during, 47
Mast cells in mouse skin, rapid technic for demonstrating, 185
Matzke, Edwin B. (*See Flint, Thomas J.*)
May, J. Zur fluoreszenzmikroskopischen Unterscheidung lebender und toter Bakterien mittels Akridinorangefärbung, (abs.), 253
Mayhew, R. L. A method for using methylene blue and eosin as a stain for sections, (abs.), 197
Membership list, 1949, Biological Stain Commission, 193
Merrill, R. C., Spencer, R. W. and Getty, R. The effect of sodium silicates on

the absorption spectra of some dyes, (abs.), 133
Methenamine silver method for argentaffin cells, Gomori's, a five-hour variant of, 225
Methyl green, 22, 136, 165, 166
Methyl orange, comparison with a recent German sample, 8
Methyl red, 72
Methyl violet, 199
comparison with a recent German sample, 5
Methylene blue, 71, 85, 94, 165, 166, 168, 185, 186, 188, 196, 197, 200, 207, 208, 209, 210, 211, 213, 232, 233, 252, 253
comparison with a recent German sample, 4
Methylene green, 207, 212, 213, 251
Methylene violet, 208, 213
Meyer, R. L. A new chromosome stain and its relationship to atypical cell proliferation, (abs.), 256
Michael, Paul and Markell, E. K. Modified Papanicolaou stain for amebae, (abs.), 253
Microörganisms (*Abs. section*), 71, 134, 199, 252
Microradiography, 134, 135, 254
Microscope and other apparatus (*Abs. section*), 67, 195, 251
Microtechnic in general (*Abs. section*), 68, 195
Miller, E. C. (*See Price, J. M.*)
Miller, J. A. (*See Price, J. M.*)
Morley, Thomas. Staining of plant materials cleared in NaOH, 231
Morris, R. J. and Brode, W. R. The relation between the absorption spectra and the chemical composition of dyes. XX. Induced noncoplanarity in symmetrical benzidine dyes, (abs.), 133
Morrison, P. H. (*See Singer, M.*)
Mounting media, 252
for phase microscope specimens, 241
Mouse skin, rapid technic for demonstrating mast cells in, 185
Multiple histopathological slides, a method for mass preparation of, 99

Negative-staining of protozoa with nigrosin, 79
Nerve-cell organoid, new, demonstration of, 201
Nerve fibers, supravital staining with thiazin dyes, 207
Nerve tissue, plastic embedding of thick celloidin sections of, 137
Nervous tissue, impregnation of, 198
Neutral red, 72, 73–77, 200
comparison with a recent German sample, 6
Neutral violet, 76
New methylene blue, 207, 212, 213, 251
Nichols, J. Improved method for handling photolabile liquids, (abs.), 68
Nichols, M. Starr. Gentian (crystal) violet solution for Gram stain, (abs.), 253
Nigrosin, 79–84
negative staining of protozoa with, 79
Nile blue, 72
comparison with a recent German sample, 4
Nissl bodies on frozen sections, acid thionin stain for, 143
Notes on technic, 191–192, 249–250
Nowak, A., Jr. (*See Zahl, Paul A.*)

Observations on the staining of *Corynebacterium diphtheriae*, 165
Orange G, 70, 80, 103, 106, 200
comparison with a recent German sample, 7
Organoid, nerve-cell, new, demonstration of, 201

Packard, C. E. The effects of certain chemicals on the macronucleus of *Spirostomum teres*, with notes on the genus, (abs.), 251
Paracarmine, 112, 114
Paraffin-rosin-celloidin method, rapid, for embedding tissues, 87
Pararosanilin, comparison with a recent German sample, 6
Pariser, R. (*See Livingston, R.*)
p-dimethylaminoazobenzene, 200
Pease, D. C. and Baker, R. F. Sectioning techniques for electron microscopy using a conventional microtome, (abs.), 67
Pennington, Derrol. The use of periodate in microbiological staining, (abs.), 253
Phase microscope specimens, mounting media for, 241
Phase microscopy, 67, 68, 195
Phenylhydrazine, photo-oxidation of, 72
Phloxine, 73, 101
comparison with a recent German sample, 3, 6
Phosphatase, dehydration of, 254
specificity of, 255, 256,
Phosphatase, acid, chemical and histochemical study of the technic for, 147
Photolabile liquids, handling of, 68
Photomicrography, 67, 195
Picric acid, 68, 76, 82, 127–131, 192
Picric-acid-Feulgen block stain, additional data, 127
Pigments, red, blood, selective demonstration of, 13
Pirie, D. G. (*See Clayson, D. H. F.*)
Plant chromosomes, brilliant cresyl blue as a stain for, 33
some modifications of Warmke's per-

manent section-smear method for, 171
Plant materials cleared in NaOH, staining of, 231
Plant microtechnic (*Abs. section*), 70, 134, 198, 252
Plant parts, Delafield's hematoxylin and safranin for, 191
Plant tissue, staining of, 191
Plastic embedding of thick celloidin sections of nerve tissue, 137
Poirer's blue, 80
Polarographic analysis, 133
Pollen tube culture on a lactose medium, 9
Ponceau de xylidine, 191
Ponceau-fuchsin as a routine counterstain, 191
Porter, Robert W. and Davenport, H. A. Golgi's dichromate-silver method. 1. Effects of embedding. 2. Experiments with modifications, 117
Powers, Margaret M. (*See Lassek, A. M.*)
Prevention of loose sections in the Bodian protargol method, 249
Price, J. M., Miller, E. C. and Miller, J.A. The intracellular distribution of protein, nucleic acids, riboflavin, and protein-bound aminoazo dye in the livers of rats fed p-dimethylaminoazobenzene, (abs.), 200
Protargol method, Bodian, prevention of loose sections in, 249
Protozoa, intestinal, a single solution iron-hematoxylin stain for, 57
Protozoa, microtechnic for, 253, 254
negative staining of with nigrosin, 79
Prussian blue, 109–114
Pyronin, 72, 136, 196, 199
Pyronin B, comparison with a recent German sample, 3, 7
Pyronin Y (G), comparison with a recent German sample, 3, 7

Queiroz, Lopes A. (*See Serra, J. A.*)
Quidet, P. (*See Hitier, H.*)

Rabinovitch, M., Junqueria, L. C. and Fajer, A. A chemical and histochemical study of the technic for acid phosphatase, 147
Ramsbottom, J. M. and Strandine, E. J. Comparative tenderness and identification of muscles in wholesale beef cuts, (abs.), 198
Rapid rosin-celloidin-paraffin method for embedding tissues, 87
Rapid technic for demonstrating mast cells in mouse skin, 185
Rat anterior hypophysis, an azocarmine stain for differential cell analysis of, 103
Rawson, Arnold J. Acidfast property of *Histoplasma capsulatum*, (abs.), 254
Rhodamine, 252
Rhodamine 6G, 133
Richards, Oscar W. Phase microscopy, (abs.), 67
Ricker, Ann G. (*See Jaques, Louis B.*)
Rigorous re-definition of the plasmal reaction, 19
Root tip chromosomes, hydrochloric acid as a fixative for, 95
Rosanilin, comparison with a recent German sample, 3, 6
Rose bengal, 218, 220, 221
comparison with a recent German sample, 3, 8
Rosenbaum, Robert M. Negative-staining of protozoa with nigrosin, 79
Rosenberg, Lauren E. and Friend, James R., Jr. Plastic embedding of thick celloidin sections of nerve tissue, 137
Rosin-celloidin-paraffin method, rapid, for embedding tissues, 87
Round worms, whole mounts of for morphological studies, 229
Ruthenium red, 70
Rynkiewicz, H. J. (*See Davis, H. L.*)

Safranin O, 85, 86, 168, 169, 191, 192, 231, 232, 233, 251
comparison with a recent German sample, 3, 7
Schertiger, Ann M. (*See Stewart, Wilson N.*)
Schiff's reagent, deterioration of, 237
Schwarz, E. R. (*See Broadfoot, H. H.*)
Sectioning, 67
Seed germination indicator, 198
Selective coloration of tissue, "dispersion staining" method for, 61
Selective demonstration of red blood pigments (hemoglobin and erythrocruorin) in microscopic balsam preparations, 13
Serra, J. A. and Queiroz-Lopes, A. Direct demonstration of basic protein in the chromosome and nucleolus, (abs.), 135
Donnés pour une cytophysiologie du nucléole. L'activité nucléolaire pendant la croissance de l'oocyte chez des Helicidae, (abs.), 136
Une méthode pour la démonstration histochimique du phosphore des acides nucléiques, (abs.), 136
Shropshire, R. F. Oblique photographic illuminator, (abs.), 195
Siem, R. A. (*See Bayliss, M.*)
Silica replication, 195
Silver complexes for histochemical demonstration of glycogen, 25
Silver impregnation, 117, 197, 225, 251
Silver staining, concentrated formalin versus a 10% solution as a fixative preceding, 25

Simplified method for the double embedding of tissue, 223
Singer, M. and Morrison, P. H. The influence of pH, dye, and salt concentration on the dye binding of unmodified and modified fibrin, (abs.), 200
Single solution iron-hematoxylin stain for intestinal protozoa, 57
Smear preparations, permanent, treatment of *Trillium erectum* prior to and during mass production of, 47
Smull, Margaret M. (*See Lord, Thomas H.*)
Soluble blue 2B extra, 68
Some modifications of Warmke's permanent section-smear method for plant chromosomes, 171
Sparrow, A. H. and Sparrow, Rhoda C. Treatment of *Trillium erectum* prior to and during mass production of permanent smear preparations, 39
Sparrow, Rhoda C. (*See Sparrow, A. H.*)
Spectrophotometry, 133, 196
Spencer, R. W. (*See Merrill, R. C.*)
Spermatozoa, microscopic study of, 252
Spirochaetes, staining of, 70, 254
Sputum smears, staining of tubercle organism in, 93
Staining of plant materials cleared in NaOH, 231
Staining the tubercle organism in sputum smears, 93
Starr, Grier F. (*See Heller, Richard E.*)
Stewart, Wilson N. and Schertiger, Ann M. Brilliant cresyl blue as a stain for plant chromosomes, 33
Stone, K. G. (*See Furman, N. H.*)
Stotz, Elmer. (*See Darrow, Mary A.*)
Strandine, E. J. (*See Ramsbottom, J. M.*)
Strugger, S. Fluorescence microscope examination of bacteria in soil, (abs.), 71
Fluorescence microscope examination of trypanosomes in blood, (abs.) 70
Sudan black B, 177–183, 201, 204
a new stain for chromosome smear preparations, 177
Sudan III, 91, 198
comparison with a recent German sample, 3, 8
Supravital staining of nerve fibers with thiazin dyes, 207

Tartrazine, 73
Taylor, E. Wilfred. The practical application of phase-contrast to the biologist's microscope, (abs.), 68
Tetrazolium salt, 198
Thiazin dyes in supravital staining of nerve fibers, 207
Thioflavine S, 197
Thionin, 85, 143, 144, 199, 213, 249, 250
Thionol, 207, 211, 213
Thomas, Owen Lewis. The demonstration of a new nerve-cell organoid, 201
Tissue. (*See Animal tissue or Plant tissue*)
Tolbert, B. M. (*See Branch, G. E. K.*)
Toluidine blue O, 133, 165, 167, 168, 169, 207, 212, 213
comparison with a recent German sample, 3, 4
Toluylene red, 76
Tompkins, Edna H. M. Methods to increase accuracy in the use of Hayem's solution for red blood counts, (abs.), 134
Treatment of *Trillium erectum* prior to and during mass production of permanent smear preparations, 39
Tubercle organism in sputum smears, staining of, 93
Tumor tissue, staining of, 251

Vaginal smears, a new fixative for, 145
staining of, 195, 253
Valade, Paul. Récherches histochimiques sur les lipides de l' écorce cerebrale, (abs.), 198
Vallance-Owen, J. The histological demonstration of glycogen in necropsy material, (abs.), 198
Van Duijn, C., Jr. Substitutes for cedarwood oil, (abs.), 196
Victoria blue, 196
Vital staining, 196, 251

Warmke's permanent section-smear method for plant chromosomes, some modifications of, 171
Weiland, G. S. (*See Figge, Frank H. J.*)
Weinrebe, N. Stain for *Borrelia recurrentis*, (abs.), 254
Whole mounts of flat and round worms for morphological studies, 229
Williams, Agnes I. (*See Boyd, George A.*)
Winston, Ruth L. (*See Davidson, Harold B.*)

Yeast ascospores and vegetative cells, differentiation of, 85
Yolk granules, amphibian, differential staining of, 249

Zahl, Paul A. and Nowak, A., Jr. A rapid technic for demonstrating mast cells in mouse skin, 185